



## Plastic Shopping Bags Get the Job Done!

The plastic shopping bag is a valuable resource that provides a safe, convenient and hygienic way to transport groceries or other purchases. Each bag weighs around 6 or 7 grams, but can easily carry 6.5 kilograms – approximately 1,000 times its own weight. The bags can be reused in many ways and then recycled into new products, such as new bags, plastic shopping carts and baskets, compost bins, paneling, laminate sub-flooring, landscape timber and lumber.

## Plastic Bag Fast Facts

### Environmental Impact

- They are one of the greenest and most energy-efficient bag materials produced today.<sup>1</sup>
- Compared to plastic shopping bags, paper bags use 3.4 times more energy, produce 2 times the green house gas emissions and use 17 times more water in their manufacture.<sup>2</sup>
- The amount of resin used in each bag has been decreased or “lightweighted” over time. Today’s plastic shopping bags use 75 % less resin than they did 20 years ago and 63 % less energy in their manufacture, while maintaining the same strength and durability.
- Yearly, the manufacture of all the plastic shopping bags used in Canada account for less than one-tenth of 1% of the annual oil and natural gas use in Canada.
- It takes 7 trucks to haul 2 million paper bags, and only 1 truck to haul 2 million plastic bags.

### Health and Safety

- Plastic shopping bags protect our food from external contaminants, and other serious food borne risks such as Salmonella and e Coli.

### Reuse and Recycling

- Plastic shopping bags enjoy high re-use among Canadians. Independent waste audits show that at least 50% of all plastic bags are reused eg. as kitchen catchers, picking up after pets, carrying lunches and books etc.
- Conventional plastic shopping bags are 100% recyclable.
- Currently, there are over 1,500 retail stores across Canada where consumers can bring back any empty plastic shopping bags for recycling.
- In Canada, 44 % of the population has access to plastic bag recycling through curbside recycling programs and drop-off depots.
- Across North America the infrastructure for recycling bags and film is increasing. Some jurisdictions such as the State of California, New York City and Chicago have even passed legislation mandating at-store bag recycling.
- The market for recycled bags is worth \$2 billion in North America.

### Landfill

- If all of the plastic bags used in Canada were to end up in landfill, they would make up less than 1% of residential solid waste by weight.
- Percentage breakdown of municipal landfill is: Organics 45%, Paper 22%, Plastics 9%, Glass 5% and Metals 3%.<sup>3</sup>

### Litter

- Plastic shopping bags are not a major component of litter. Studies of Greater Toronto area communities show plastic shopping bags consistently account for less than 1% of urban litter.

<sup>1</sup> Recyc-Québec, November 2007.

<sup>2</sup> Life Cycle Assessment for Three Types of Grocery Bags. Prepared for the Progressive Bag Alliance. Boustead Consulting & Associates.

<sup>3</sup> Stats Canada. Environmental Accounts and Statistics Division.

**Myth: Plastic shopping bags take hundreds of years to biodegrade.**

**Fact:** Biodegradation in landfill is not good for the environment. Biodegradable materials ending up in landfill degrade over a long period of time and during this process, produce leachates and methane, a potent greenhouse gas. Conventional plastic shopping bags are inert in landfill; they don't produce methane or leachates. But they should not end up in landfill. They are designed to be reused and recycled into useful products.

**Myth: Paper bags are better than plastic shopping bags.**

**Fact:** A California court recently struck down a proposed ban on plastic carry-out bags due to "substantial evidence" that supports the notion that single-use paper bags are more damaging to the environment than single-use plastic bags. Another lifecycle study found that plastic bags require 5 times less water, emit 3 times fewer acid gases and generate 3 times fewer greenhouse gas emissions than paper bags. And, it takes 91% less energy to recycle a pound of plastic than to recycle a pound of paper.<sup>4</sup>

**Myth: Billions of plastic shopping bags are produced each year.**

**Fact:** In Canada, the majority of petroleum resources is used as fuel for heating, electricity and vehicles. The amount used in producing bags is trivial in comparison. Plastic shopping bags account for less than 1/10th of 1% of all petroleum produced in Canada. The energy to manufacture all plastic products (packaging, construction, automotive and electronic components) uses only 4% of Canada's annual oil and natural gas consumption.

**Myth: Plastic shopping bags are killing marine life.**

**Fact:** This myth is based on a misinterpretation of a 1987 Canadian study, which found that marine mammals were being killed by discarded nets, lines and ropes accidentally lost at sea from fishing vessels. The study did not mention plastic shopping bags. Fifteen years later, in 2002, when the Australian government commissioned a report into the effects of plastic bags, the authors misquoted the study, mistakenly attributing the deaths to "plastic bags".<sup>5</sup>

**Myth: Banning and taxing plastic shopping bags is the answer.**

**Fact:** Bans and taxes actually don't work and have unintended consequences.

A 22-cent Irish tax on plastic bags led to a 90% decrease in the number of bags handed out at checkout. Instead, consumers purchased heavy-duty plastic bags, such as kitchen catchers. These bags have 82% more plastic in them and as a result, the amount of plastic consumed in Ireland actually increased by 21%

In 2006, Taiwan lifted a ban on plastic bags in the fast food sector because it led to a massive amount of material going to landfill as people switched to paper bags. The result was also a 7-fold increase in the amount of greenhouse gases produced.

After reviewing the Irish experience, the U.K, Scotland, Italy and the European Union confirmed that the consumption of plastic in Ireland increased as a result of the bag tax, and they all rejected calls for bag bans/taxes. Ireland also claimed that the tax would relieve the litter problem; reports conclude that before the tax plastic bags were a small portion of the Irish litter stream (2%).

**Myth: Bags are a major component of marine litter.**

**Fact:** Not true. Facts from the Great Canadian Shoreline Clean-up, an annual nation-wide anti-litter event, show that from 2003-2006 bags of all material types (paper bags, grocery bags, dry cleaning bags, heavy duty garbage bags, reusable bags, natural fiber sacs etc.) range from 5% to 8% of the total litter collected. Estimates for plastic shopping bags alone would be much lower. The main litter items collected in 2006 across Canada were cigarette butts at 38%, food wrappers of all materials at 17%, 15% beverage containers, take out packaging materials at 8%, caps and lids for containers at 7% and miscellaneous other articles. Litter is pervasive and not a material specific problem.<sup>6</sup>

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<sup>4</sup> Évaluation des impacts environnementaux des sacs de caisse Carrefours. Prepared for Carrefour. Ecobilan. July 2004.

<sup>5</sup> "Plastic bags are evil? Think again, some scientists say" London Times. March 8, 2008.

<sup>6</sup> Great Canadian Shoreline Clean-up. Dirty Dozen List. [www.vanaqua.org/cleanup](http://www.vanaqua.org/cleanup)

# Recycle Your Plastic Shopping Bags!

